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**AMENDMENTS TO THE CLAIMS**

These claims will replace all prior versions, and listing, of the claims in the application:

Claims 1-25: (Cancelled)

**Claim 26:** (Currently amended) A method of synthesizing a modified therapeutic peptide capable of forming a peptidase-stabilized therapeutic peptide conjugate, the peptide comprising between 3 and 50 amino acids and having a carboxy terminal amino acid, an amino terminal amino acid, the method of comprising the steps of:

- a) synthesizing the peptide from the carboxy terminal amino acid or the amino terminal amino acid,
- b) sequentially and selectively oxidizing any pairs of cysteine residues in said therapeutic peptide to form disulfide bridges in said therapeutic peptide;
- c) attaching a protecting group to any remaining cysteine residues that do not form said disulfide bridges in said therapeutic peptide; and
- d) coupling a reactive group to the carboxy terminal amino acid, to the amino terminal amino acid, or to an amino acid between the carboxy terminal amino acid and the amino terminal amino acid, wherein the reactive group is capable of reacting with an amino group[[s]], an hydroxyl group[[s]] or a thiol group[[s]] on blood component to form a covalent bond therewith.

**Claim 27:** (Previously presented) A method as claimed in claim 26 wherein the reactive group is selected from the group consisting of succinimidyl- and maleimido-containing groups.

**Claim 28:** (Cancelled)

**Claim 29:** (Previously presented) A method as claimed in claim 27 wherein the reactive entity is a maleimido-containing group.

**Claim 30:** (Previously presented) A method as claimed in claim 26, further comprising bonding a lysine residue to said peptide, wherein the reactive group is coupled to the peptide via said lysine residue.

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Claim 31: (Previously presented) A method as claimed in claim 26 wherein the reactive group is coupled to the carboxy terminal amino acid of the peptide.

Claim 32: (Previously presented) A method as claimed in claim 26 wherein the peptide does not contain a cysteine.

Claim 33: (Previously presented) A method as claimed in claim 26 wherein the therapeutic peptide contains two cysteines, the two cysteines are oxidized to form a disulfide bridge, and the reactive group is coupled to the peptide.

Claim 34: (Previously presented) A method as claimed in claim 32 wherein the peptide is synthesized from the carboxy terminal amino acid.

Claim 35: (Previously presented) A method of synthesizing a modified therapeutic peptide and forming a peptidase-stabilized therapeutic peptide conjugate, the peptide comprising between 3 and 50 amino acids and having a carboxy terminal amino acid and an amino terminal amino acid, the method comprising the steps of

synthesizing the peptide from the carboxy terminal amino acid,

coupling a maleimido-containing group, to the carboxy terminal amino acid, the amino terminal amino acid, an amino acid between the carboxy terminal amino acid and the amino terminal amino acid, and

reacting the maleimido-containing group with a thiol group on a blood component to form a covalent bond therewith.

Claim 36: (Previously presented) A method as claimed in claim 35 wherein the maleimido-containing group is coupled to the carboxy terminal amino acid.

Claim 37: (Previously presented) A method as claimed in claim 35, further comprising bonding a lysine residue to said peptide, wherein the maleimido-containing group is coupled to the peptide via said lysine residue.

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Claim 38: (New) A method as claimed in claim 35 wherein said reacting step occurs *in vivo*.

Claim 39: (New) A method as claimed in claim 35 wherein said reacting step occurs *ex vivo*.

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